

The documentation and process conversion measures necessary to comply with this revision shall be completed by 22 November 2001.

INCH POUND

MIL-PRF-19500/687
AMENDMENT 1
22 August 2001

PERFORMANCE SPECIFICATION

SEMICONDUCTOR DEVICE, FIELD EFFECT RADIATION HARDENED (TOTAL DOSE AND SINGLE EVENT EFFECTS) TRANSISTOR, N-CHANNEL SILICON
TYPES 2N7509, 2N7510, AND 2N7511 JANTXVD, R AND JANSJ, R

This amendment forms a part of MIL-PRF-19500/687, dated 14 March 2001 and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

1.4, Type 2N7509, Max $r_{DS(on)}$ column, $T_J = +25^\circ\text{C}$ column, delete "0.014 Ω " and substitute "0.0115 Ω ".

1.4, Type 2N7509, Max $r_{DS(on)}$ column, $T_J = +125^\circ\text{C}$ column, delete "0.026 Ω " and substitute "0.021 Ω ".

PAGE 9

TABLE I, subgroup 2, static drain to source "ON" state resistance, maximum limit, delete "0.014" and substitute "0.0115".

TABLE I, subgroup 2, static drain to source "ON" state voltage, maximum limit, delete "1.010" and substitute "0.840".

PAGE 10

TABLE I, subgroup 3, static drain to source "ON" state resistance, maximum limit, delete "0.026" and substitute "0.021".

PAGE 12

TABLE I, subgroup 7, reverse recovery time, type 2N7509, maximum limit, delete "300" and substitute "290".

TABLE I, subgroup 7, reverse recovery time, type 2N7510, maximum limit, delete "370" and substitute "375".

PAGE 14

TABLE II, subgroup 6, electrical measurements, type 2N7509, LET = 56 to 60 MeV-cm²/mg; delete " $V_{GS} = -2\text{ V}$ " and substitute " $V_{GS} = -5\text{ V}$ ".

PAGE 16

TABLE III, subgroup 2, static drain to source "ON" state resistance, pre-irradiation and post-irradiation maximum limit, delete "0.014" two places and substitute "0.0115" two places.

TABLE III, subgroup 2, static drain to source "ON" state voltage, pre-irradiation and post-irradiation maximum limit, delete "1.010" two places and substitute "0.840" two places.

PAGE 17

TABLE IV, step 5, static drain to source "ON" state resistance, maximum limit, delete "0.014" and substitute "0.0115".

TABLE IV, step 6, static drain to source "ON" state voltage, maximum limit, delete "1.010" and substitute "0.840".

PAGE 22

FIGURE 4, delete and substitute:

"

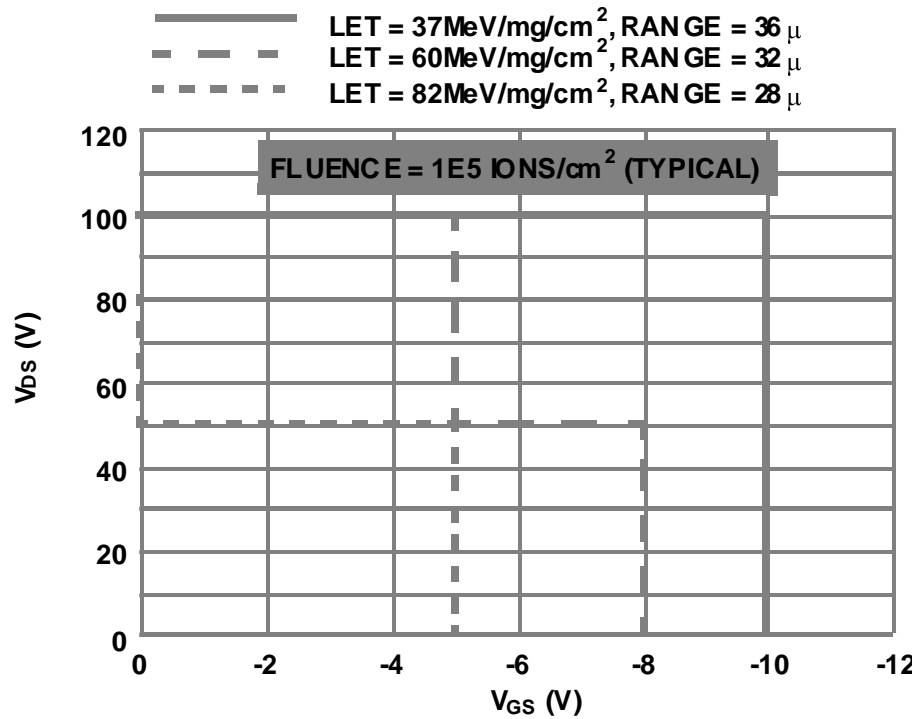


FIGURE 4 SEE safe operating area graphs. "

Custodians:
Army - CR
Navy - NW
Air Force - 11
NASA - NA
DLA - CC

Preparing activity:
DLA - CC

(Project 5961-2472)